## CONTENTS VOLUME 10, 1978

*Research Papers*

Superficial geochemical dispersion around sulphide deposits: some examples in France
J. Barbier and E. Wilhelm (Orléans, France) . . . . . 1

Correction of matrix effects in the analysis of stream waters by flameless atomic absorption spectrophotometry
A.W. Fordham (Glen Osmond, S.A., Australia) . . . . . 41

Utilizing soil geochemistry, ground magnetic, and radiometric surveys to outline a Blue Ridge, ultramafic body in North Carolina
J. Callahan, F. Hearn, S. Heron III, D. Schumaker and S. Swanson (Boone, N.C., U.S.A.). . . . 53

Eruptive environments and inferred exploration potential of metabasalts from New South Wales
E. Scheibner (Sydney, N.S.W., Australia) and J.A. Pearce (Milton Keynes, Great Britain). . . . 63

Partitioning of manganese, iron, copper, zinc, lead, cobalt, and nickel in black coatings on stream boulders in the vicinity of the Magruder mine, Lincoln Co., Georgia
R.H. Carpenter, G.D. Robinson and W.B. Hayes (Athens, Ga., U.S.A.) . . . . . 75

Heavy minerals in stream sediments, southwest Norway
H. Stendal (Copenhagen, Denmark) . . . . . 91

*Letter to the Editor*

Carbonates — a guide to hydrocarbons . . . . . 103

*Book Reviews*

*Hydrothermal Uranium Deposits* by R.A. Rich, H.D. Holland and U. Petersen — H.D. Knipping . . . . . 109

*Exploration for Uranium Ore Deposits* — A.G. Darnley . . . . . 110

*Prospecting in Areas of Glaciated Terrain 1977* edited by M.J. Jones — I.L. Elliott . . . . . 113

*Marine Manganese Deposits* edited by G.P. Glasby — J.S. Tooms . . . . . 114

*Research Papers*

Geochemical dispersion of heavy metals via organic complexing: a laboratory study of copper, lead, zinc, and nickel behaviour at a simulated sediment-water boundary
K.S. Jackson and G.B. Skippen (Ottawa, Ont., Canada) . . . . . 117

Light hydrocarbons in Gulf of Mexico water: sources and relation to structural highs
R.H. Reitsema, F.A. Lindberg and A.J. Kaltenback (Littleton, Colo., U.S.A.) . . . . . 139

Seasonal variations of helium, radon, and uranium in lake waters near the Key Lake uranium deposit, Saskatchewan
W. Dyck (Ottawa, Ont., Canada) and B. Tan (Calgary, Alta., Canada) . . . . . 153

Improved stepwise solvent extraction scheme for geochemical trace analysis using flame atomic absorption
P. Hannaker and T.C. Hughes (Parkville, Vic., Australia). . . . . 169

Biogeochemical copper anomalies on Salajar Island, Indonesia
R.R. Brooks, E.D. Wither (Palmerston North, New Zealand) and L.Y.Th. Westra (Utrecht, The Netherlands) . . . . . 181

*Short Notes*

A note on the history and literature of geochemical exploration
J.W. Marchant (Rondebosch, South Africa) . . . . . 189

A tubular-scoop sampler for stream sediments
G.C. Curtin (Denver, Colo., U.S.A.) . . . . . 193

*The Association of Exploration Geochemists*

Mineral development in the 1980's: an international perspective
R.F. Horsnail (Denver, Colo., U.S.A.) . . . . . 195

*Research Papers*

Regional geochemical anomalies related to plate tectonic models for the northwestern Canadian Shield
R.J. Allen (Winnipeg, Man., Canada) . . . . . 203
Hydrogeochemical methods for base metal exploration in the northern Canadian Shield
E.M. Cameron (Ottawa, Ont., Canada) . . . . . 219
Analysis of fluoride, chloride, nitrate and sulphate in natural waters using ion chromatography
B.W. Smee, G.E.M. Hall (Ottawa, Ont., Canada) and D.J. Koop (Toronto, Ont., Canada) . . . 245
Detrital tin patterns in stream sediments and soils in mid-Cornwall
A.C. Dunlop (Sydney, N.S.W., Australia) and W.T. Meyer (Tulsa, Okla., U.S.A.) . . . . . 259
The decay products of $^{222}Rn$ in etched track radon detection
R.H. McCorkell and J.W. Card (Ottawa, Ont., Canada) . . . . . 277
Geochemical dispersion from the Gamsberg orebody, northwestern Cape, South Africa
A.N. McLaurin (Beaufort West, South Africa) . . . . . 295
Colorimetric determination of arsenic in geochemical samples
N.J. Marshall (Sydney, N.S.W., Australia) . . . . . 307

203
219
245
259
277
295
307